ing this formidable complaint were found totally ineffectual. One point so far guided the diagnosis, namely, that the side of the face gradually became smaller, and the idea occurred that the whole disturbance might possibly arise from the point of the fang of the wisdom tooth, which had by this time come forward, impinging upon the vessels and nerve passing from the foramen, causing strangulation. Upon the tooth being extracted, the point was sharp and elongated, slightly twisted, which is seldom the case, and was also one of two fangs, the usual rule being that in every wisdom tooth there is only one round, blunt pointed termination. This elongated fang had a small circle of exostosed bone about two lines from the point, showing unmistakably how far the insertion had taken place, and leaving no doubt as to its being the cause of all the suffering.

"The symptoms very soon assumed a new form, and the parotid and submaxillary glands, which had been much enlarged, under the action of fomentation and small doses of bromide of potassium, were restored to their normal proportions. One peculiar symptom presented itself and caused some continuation of the nervous excitement, namely, the wound made by the extraction of the tooth did not heal up till after about three weeks, and the repeated application of a solution of chloride of zinc and nitrate of silver. At this time, with the exception of being highly nervous, the patient is quite convalescent, and the face is gradually assuming its normal form. This case is in itself a peculiarly interesting one, as showing the importance of local investigation which in very many cases is neglected, constitutional treatment only being adopted.

"CASE II.—Being seated opposite a gentleman at dinner some years ago in the county of Ayr, the writer observed that he was subjected to repeated and violent paroxysms of pain, more especially when mastication was attempted. This continued more or less during the evening; and upon asking him some particulars as to the origin and progress of his suffering, he stated that for ten years he had been tortured by inveterate tic which would yield to no treatment. Upon expressing an opinion that possibly the teeth might have something to do with it, an appointment was made for next day, and a consultation took place. On a strict investigation, at first nothing emerged to lead to a diagnosis favourable to the hypothesis that the teeth might be the cause, as they were all perfectly sound, indeed particularly so, but very closely packed together. On repeated sounding, especially of the wisdom teeth on the right side, a paroxysm was brought on, and this was elicited on three or four occasions consecutively. After due consideration, the tooth was extracted and there was found upon the point of the fang distinct exostosis. For some weeks the patient had a certain amount of rest, but the symptoms again recurred with all their former persistence. Seeing that some relief had been got by the treatment, it was followed up, and the second molar was extracted with beneficial effects—the period of relief being much extended—the exostosis was found upon all the fangs. For some months this went on, when again the pain appeared but very distinctly upon the side which had not been treated. The same course of practice was followed and the result was that the patient had immunity from the tic symptoms, and he has since died from other disease."

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39. *Concussion: Lesion of the Spinal Cord with Extensive Secondary Degenerations, followed by Muscular Atrophy.*—Dr. H. CHARLTON BASTIAN read before the Royal Medical and Chirurgical Society a case of much interest, not only on account of the extensive primary lesions discovered in the spinal cord (which were produced without fracture or displacement of vertebræ, from a mere concussion, not more severe than might be experienced in a railway accident), but also from the fact that extensive degenerations throughout the spinal cord, occasioned by these lesions, entirely escaped observation at a carefully conducted post-mortem examination. It is also of much interest because "secondary degenerations" following undue pressure upon, or rupture of portions of, the spinal cord, though first carefully described in 1851 by Türck, of Vienna, have hitherto, notwithstanding their importance, attracted little or no attention in this country. They afford a most valuable means of tracing the distribution of nerve-fibres in the spinal cord and higher nerve-centres, whilst an attentive study of the histological changes by which they are brought about not only

shows the close relationship existing between these degenerative processes and those which occur in the various kinds of cerebral and spinal *ramollissement*, but goes far to demonstrate the non-inflammatory nature of the latter changes, concerning which there has always been so much dispute. The man on whom these observations have been made was a labourer, twenty-six years of age, who, whilst asleep, rolled off the top of a hayrick, and fell through a distance of twenty-five feet to the ground. He was at once found to have lost all voluntary power in both lower extremities and in the right arm. After a week he was admitted into St. Mary's Hospital, when the same limbs were found to be almost completely paralyzed, though sensation in these and other parts was unaffected. The respiration was for the most part diaphragmatic. After the second month the right forearm and hand gradually became more and more rigidly flexed, and although formerly moderately stout, he gradually lost flesh, in spite of a most nourishing diet. At the time of his death, nearly six months after the accident, he had wasted almost to a skeleton. The paralysis underwent but little variation. Although no changes could be detected by the naked eye in the spinal cord when it was in its fresh condition, these could be detected with the greatest ease after it had been immersed for a week or two in a dilute solution of chromic acid, owing to the fact that the areas of degeneration which appeared on a freshly cut surface of the cord retained their natural white colour, whilst the surrounding healthy nerve-tissue had been stained in the usual manner, and exhibited a yellowish-brown tint. After making a number of sections through all parts of the cord, it was found that the original lesions produced by the violent concussion of the fall were situated in the upper part of the cervical enlargement, and consisted of three distinct ruptures through the gray matter of the right side in different directions. In one small part only of the cervical enlargement was there any loss of symmetry in the two halves of the cord, and this was produced from a shrinking and collapse of its right half at the level of the most extensive rupture. Below these original lesions areas of degeneration gradually diminishing in extent were traced throughout the dorsal region of the cord, and on as far as the commencement of the lower third of the lumbar enlargement. They occupied the inner part of each anterior column and the posterior part of each lateral column, though in this latter situation the degeneration was much more marked on the right than on the left side. Below the primary lesions the posterior columns were healthy, but above them certain ascending degenerations occupying definite areas could be traced with the greatest distinctness. These gradually diminished upwards through the medulla oblongata, and finally disappeared in the floor of the fourth ventricle and the corpora restiformia. The direction taken by the areas of degeneration affords a pathological confirmation of the views of anatomists concerning the distribution of important fasciculi of nerve-fibres in the spinal cord and medulla oblongata. The columns of degenerated tissue have been brought about by the following changes: 1. Nutritive death and subsequent degeneration of nerve-fibres throughout their whole extent beyond the seats of rupture, the degeneration passing through various stages until complete molecular disintegration of the myeline has been produced. 2. The presence of such a large quantity of nerve-matter in a state of retrograde metamorphosis leads to the so-called "atheromatous condition" of the smaller vessels, and also to the fatty degeneration and repletion of some of the connective-tissue cells between the nerve-fibres, so as to produce the well-known "granulation corpuscles;" whilst, lastly, coincidently with these changes, and even after they have ceased, there goes on a hypertrophy or overgrowth of the normal connective tissue lying between the wasted nerve-fibres. This hypertrophy may perhaps be explained in great part by the fact that much more nutritive matter is placed at the disposal of these elements, seeing that the nerve-fibres which form such a large proportion of the bulk of the part are dead, and no longer assimilate pabulum from the blood, whilst no appreciable alteration in the vascular supply has been brought about. The axis-cylinders of the nerves undergo comparatively little alteration even after long periods. The steps of this process are almost identical with those taking place in softening of the brain or spinal cord; only in the latter case the changes are brought about more quickly, and the initial stage is generally due to some defect in the vascular supply to the part. In connection with the general muscular atrophy it is interesting to bear in mind that in addition to the disease of the spinal cord there was found in this case a decided atrophy of the great semilunar ganglia of the sympathetic system, and an indication also, by microscopical examination, of a fatty metamorphosis of these parts. These were the only portions of the sympathetic system examined. Many French and German pathologists now believe that progressive muscular atrophy is due to a primary disease of the sympathetic ganglia. The length of time that the patient survived is worthy of note, seeing that his respiration was said to be diaphragmatic from the first. There are anatomical reasons, however, for believing that it was not wholly so. Some observations are made concerning the symptoms presented during life—such as startings and pains in paralyzed limbs, and the condition of *contracture* which supervened after the second month in the right upper extremity; whilst, lastly, as regards the prognosis even in severe cases of secondary degeneration of the spinal cord, five or six instances are cited in which cures have been brought about.—*Med. Times and Gaz.*, Oct. 26, 1867.

40. *Dislocation of Radius and Ulna forwards.*—A case of this exceedingly rare lesion lately occurred in the clinique of M. MAISONNEUVE, and is carefully detailed. No fracture of any of the bones of the elbow-joint was present; the patient was exceedingly thin, so that everything in the position, both of the bones and the muscles, could be most accurately determined; so that this case may fairly be added as a sixth authentic one to the five already collected by Hamilton, in his great work on fractures and dislocations. The symptoms were well-marked and complete. The dislocation was reduced, but in the end a considerable portion of the thin skin sloughed; the slough had separated, and the case was progressing favourably at the date of the report.—*Edin. Med. Journ.*, Aug. 1867.

41. *Acetic Acid in Cancer.*—Dr. JAMES MORTON communicated to the Glasgow Medico-Chirurgical Society several cases of cancer treated by Dr. Broadbent's plan. (See number of this Journal for January, 1867, p. 229, *et seq.*) Dr. M., in his remarks on these cases, says: "Perhaps in not one of these cases has acetic acid, as thus applied, proved adequate to the complete cure of a single sore, or the eradication of one cancerous growth; and yet, from its application some benefits have been experienced by the sufferers. The most remarkable circumstance is the comparative freedom from pain when dilute acetic acid was used, which contains about four per cent. of real acid. Considerable pain was complained of when the glacial acid was employed, but this contains as much as eighty-four per cent. of real acid, and the pain produced by caustics has always been one of the chief objections to their use.

"In no case has there been any apparent acceleration of progress. Under a fear of such a result the idea of making punctures into malignant growths has been long discountenanced, and even now can only be justified with a view to their amelioration or removal. A more or less distinct retrogression in respect to size seems to be one of the effects of the use of the acid, and a corresponding retardation of progress.

"We are not yet in a position which entitles us to say that acetic acid eradicates cancer, or to vaunt it, as, in common language, a cure for cancer. Who, that knows anything of this painful malady, does not ardently wish for such a cure? Hundreds of such have been handed from father to son, usually as family secrets, but their composition not being revealed, the profession wisely regards them with distrust. For this reason, also, the profession has been accused of apathy and indifference in regard to such matters. No accusation could be so utterly false. The profession is thirsting for such a remedy, but it must deserve the name, and must not end, as heretofore, in disappointment. The ready welcome that has been given to the recent proposal of Mr. Broadbent is a proof that professional men are open to the consideration and trial of any plausible suggestion for the cure, or even the relief of such a dire disease. So marked has this been, that here, in Glasgow, we have about as much experience of its effects and mode of action as can be found anywhere at present; and